

Date: Tue, 16 Feb 93 07:37:31 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #218
To: Info-Hams

Info-Hams Digest Tue, 16 Feb 93 Volume 93 : Issue 218

Today's Topics:

- * Looking for Alinco Mailing List Info
 - Amplifier Tuning
 - DX BULLETIN 7 ARLD007
 - Ground
- Low current DC Power in the Hamshack
 - MF1278 and MAC
 - MODS WANTED FOR HTX-100
 - Need help tuning TS690S
- PRICE? Yaesu FRG-7 & Mini-reader?
- Real Hams Pass British Exams?
- RF and Power Supply
- Updates for CT Country List
- WANTED: TH-27 mods

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 16 Feb 93 14:33:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: * Looking for Alinco Mailing List Info
To: info-hams@ucsd.edu

Several months ago I seem to remember someone posting in regards to
an Alinco Mail List that had been created. I am still in search of
the extended receive mods for the Alinco DJ-162. These mods are for
the aircraft receive.

Thanks for any info.

Ron - KA5LUG

RON@NSULA.EDU

Date: 16 Feb 93 11:29:41 GMT
From: usc!howland.reston.ans.net!agate!doc.ic.ac.uk!uknet!uos-ee!ee.surrey.ac.uk!
M.Willis@network.UCSD.EDU
Subject: Amplifier Tuning
To: info-hams@ucsd.edu

In article <14570632@hpnmdla.sr.hp.com>, alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

|> In rec.radio.amateur.misc, lwwald@lims01.lerc.nasa.gov (LARRY WALD) writes:
|>
|> >I'd like to get some feedback concerning tuning a linear that is
|> >being driven by a solid state exciter. I finally have my
|> >SB-200 talking to my ICOM and I noticed that if I tuned the SB-200
|> >for minimum reflected SWR back to the ICOM that this point did not
|> >match the point for max. power out for the SB-200. Now I was
|> >only running about 40-50 watts from the ICOM; this may have something to do
|> >with it.
|>
|> If by "tuning" you mean adjusting the plate loading and tuning controls,
|> then "of course." While the loading/tuning controls do have some influence
|> on the input impedance (SWR), this is a secondary effect: Tune up for
|> maximum power output, not lowest input SWR.

No No, tune for the maximum output power at the correct levels of grid and anode current. Just tuning for maximum power is not how to tune a valve amplifier for the cleanest signal. You can just keep on feeding in power until the amplifier flat tops or catches fire and the power meter will keep on going up. Dont tune the loading control for maximum power, tune it for correct loading as described in the manual.

The output load and tune controls should have only a small effect on the input if the amplifier is properly neutralised etc. If there is a very large effect then there is something wrong. Perhaps the SB200 design? Ground problems? Tube problems?

Even so solid state rigs can be unhappy driving odd loads. If you cant get it to work properly you can solve the problem by improving the input match.

Putting a 3dB pad between the icom and the input circuit will keep the exciter

happier. Running at say 80W pep from the rig will then give you 40 into the SB200 and an adequate amount out, cleanly.

OK, so you get a little less power out but will anyone notice?

Date: Tue, 16 Feb 93 10:59:06 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!
cis.ohio-state.edu!mstar!n8emr!bulletin@network.UCSD.EDU
Subject: DX BULLETIN 7 ARLD007
To: info-hams@ucsd.edu

=====
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
=====

ZCZC AE33
QST DE W1AW
DX BULLETIN 7 ARLD007
FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 4, 1993
TO ALL RADIO AMATEURS

SB DX ARL ARLD007
ARLD007 DX NEWS

THANKS TO SIGI, DL7U00, LONNIE, KA9WON, THE YCCC PACKETCLUSTER
NETWORK AND THE DXAC FOR THE ITEMS IN THIS WEEK'S BULLETIN.

BAKER AND HOWLAND ISLANDS. AS OF PRESS TIME THURSDAY AFTERNOON,
EST, THE AH1A CREW IS STILL AWAITING TRANSPORTATION. ROUGH WEATHER
CONDITIONS HAS BEEN THE WRENCH IN THE GEARS. HOWEVER, AH1A
CONTINUES TO BE ACTIVE WITH ONE STATION UP AND RUNNING, SO CATCH
THEM WHILE YOU CAN.

THREE DXAC NEWS RELEASES. THE ARRL DX ADVISORY COMMITTEE PROVIDES
THREE NEWS RELEASES ON FEBRUARY 4, DETAILS OF WHICH FOLLOW.

DXAC CONSIDERS ADDITIONS TO THE DXCC COUNTRIES LIST

ERITREA

THE DXAC IS CONSIDERING A PETITION TO GIVE CURRENT DXCC COUNTRY
STATUS TO THIS AREA THAT BECAME A PROVINCE OF ETHIOPIA IN 196== A
POPULAR VOTE FOR ERITREAN INDEPEDENCE IS SCHEDULED FOR APRIL 1993.
THE DXAC AWAITS THE RESULTS OF THAT VOTE PRIOR TO THEIR VOTING ON

DXCC COUNTRY STATUS.

CZECHOSLOVAKIA

THE DXAC IS STUDYING THE RECENT DISSOLUTION OF CZECHOSLOVAKIA. THE PRESENT AGENDA ITEM PROPOSES TO DELETE THE DXCC COUNTRY OF CZECHOSLOVAKIA AND ADD THE CZECH REPUBLIC AND THE SLOVAK REPUBLIC AS NEW DXCC COUNTRIES. THERE IS DISCUSSION OF THE POLITICAL ASPECTS OF THE DIVISION WHICH COULD AFFECT THE AGENDA QUESTION. A DXAC VOTE WILL BE SCHEDULED SOON.

IN ANOTHER RELEASE, THE DXAC ANNOUNCES VOTE RESULTS

ABU AIL

THE DXAC VOTED 10 TO 6 TO RECOMMEND DELETION OF THESE RED SEA ISLANDS EFFECTIVE 31 MARCH 1991, THE DATE THE RED SEA LIGHTS COMPANY RESIGNED FROM MANAGEMENT OF THE LIGHTHOUSES ON SOME OF THE ISLANDS. IT APPEARS THAT YEMEN ADMINISTERS AT LEAST SOME OF THE ISLANDS NOW. THE ISLANDS NO LONGER MEET THE DXCC RULES SEPARATION REQUIREMENT.

TEMBOURG DISTRICT OF BRUNEI

THE DXAC VOTED 16 TO 0 NOT TO RECOMMEND ADDITION OF THIS PHYSICALLY SEPARATE DISTRICT OF BRUNEI TO THE DXCC COUNTRIES LIST. THE SEPARATION DISTANCE IS SIGNIFICANTLY LESS THAN THE 75 MILES REQUIRED BY THE RULES.

AND IN A THIRD RELEASE, DXAC SEEKS INPUT ON QSLING PRACTICES

THE DXAC IS SEEKING WORLDWIDE INPUT ON SUGGESTED DXCC RULES CHANGES THAT WOULD DISCOURAGE ABUSES IN THE QSL PROCESS. INTERESTED PARTIES MAY SUBMIT EXAMPLES OF POOR QSLING PRACTICES AND SUGGESTED CHANGES UNTIL 31 AUGUST 1993. ANY CHANGE IN THE RULES MUST BE FAIR, ENFORCEABLE AND NOT PLACE BURDEN ON ARRL, THE DXCC DESK OR THE DXING COMMUNITY.

YOUR COMMENTS SHOULD BE SENT TO ARRL DXAC, 225 MAIN ST, NEWINGTON CT 06111 USA.

COOK AND SAMOAN ISLANDS. SIGI, DL7U00, WILL BE OPERATING FROM ZK1 THROUGH FEBRUARY 15. PLANS ARE TO MOVE ON TO 5W1 AND KH8 BETWEEN THE 17TH AND 28TH. THIS DXPEDITION WILL BE A TWO STATION, HIGH POWER AFFAIR ON ALL BANDS WITH CW AND SSB. QSL VIA DL7U00, EX Y23U0, SIGI PRESCH, 0-1144 BERLIN, WILHELMSMUHLENWEG 123, GERMANY.

CQ CONTEST CQ CONTEST CQ CONTEST. ON TAP FOR THE WEEKEND OF FEBRUARY 6 AND 7 ARE CW EDITIONS OF THE YL/ISSB QSO PARTY AND NORTH

AMERICAN SPRINT. FOR MORE INFORMATION ON THESE OPERATING EVENTS,
CHECK JANUARY QST, PAGE 115.

QSL ROUTES. LONNIE, KA9WON, HANDLES QSL REQUESTS FOR 4N4XA, 4N4ANT
AND 4N4XX, AND STATESIDE ONLY CARDS FOR 9A2PM, UNTIL STANDARD MAIL
SERVICE IS RESTORED.
NNNN

Date: 15 Feb 93 12:39:46 EST
From: usc!elroy.jpl.nasa.gov!sdd.hp.com!ncr-sd!ncrcae!ncrhub2!ncrgw2!psinntp!
arrl.org@network.UCSD.EDU
Subject: Ground
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:
>In article <199302121539.AA11848@cardamom.unx.sas.com> saswel@unx.sas.COM (Warren
E. Lewis) writes:

>>

>>Okay net folks...I have a few questions about grounds.

>>

>>Due to circumstances out of my control my HF Rig is located
>>on the second floor of a two story townhouse. I could drive
>>an 8ft. ground rod right next to the house, but I would have a
>>wire run of approximately 25-30 ft. from the rig to the ground
>>rod.

>>- Is this too long of a run???

>>- If it is too long of a run what other grounding options

>> would you suggest?

>

>*If* you are running a balanced antenna, this length ground run
>is not a problem. In fact no ground at all would work just as
>well except for the need of a *safety* ground. If you are running
>an unbalanced antenna, such as a long wire, then this ground length
>can cause problems. The usual solution is to use a resonant counterpoise
>or to resonate the ground wire with a ground "tuner" in these cases.

>

>Note that the important issue is a balanced antenna, not whether you
>are using balanced feeders or coax. A dipole is a balanced antenna,
>and if fed correctly with a balun, it should not present RF on the
>rig even though you are using unbalanced coax as a feeder. The important
>issue with coax is to avoid RF on the *outside* of the shield.

True, but not entirely complete. The balun simply acts to inhibit
current being conducted onto the outside of the shield from the
antenna conductors. Another common cause of RF on the shield is
induced current. The outside of the coax shield acts like any other

conductor in the field of the antenna: it picks up a signal. Since the feedline is so close to the antenna, this signal can be significantly large.

Ideally, you would cure this problem by running the coax away from the antenna at a right angle to the antenna radiator. You can't always do that, of course, because of the geometry of your house and available antenna supports. In that case, you may want to inhibit the induced current by winding the coax into a coil just before it enters the house. This is easy and effective. Use 6-8 turns of coax, typically, made from 8-10 feet of coax.

Using a balun at the antenna (you can make a balun from coiled coax, too) and a choke--if needed--at the shack, you should be able to keep the RF from getting into the shack via the feedline. Of course, you may also get direct pick-up of the transmitted signal by the equipment and station wiring itself. An effective ground can help eliminate this. Since you can't create an effective RF ground connection, your best bet is to use the counterpoise, as Gary mentions. This is simply a quarter-wavelength wire connected to the ground lug of the transmitter. Run the wire wherever you can--inside the shack, if need be. Be aware, though, that this wire may itself radiate somewhat (not as much as the antenna, of course), so don't run it right next to your telephone wiring!

None of which obviates the need for a *safety* ground. You certainly should have an effective safety ground. Just don't expect that ground to have useful RF properties when you're operating from the second floor!

Jon Bloom, KE3Z | jbbloom@arrl.org
American Radio Relay League | Justice is being allowed to do whatever
225 Main St. | I like. Injustice is whatever prevents
Newington, CT 06111 | my doing so. -- Samuel Johnson

Date: 15 Feb 93 09:04:10 -0700
From: sdd.hp.com!caen!destroyer!cs.ubc.ca!mala.bc.ca!wagner@network.UCSD.EDU
Subject: Low current DC Power in the Hamshack
To: info-hams@ucsd.edu

In article <103360148@hpfcs0.FC.HP.COM>, nmp@hpfcs0.FC.HP.COM (Noel Pace) writes:
>
> I think most of the transformer outputs are AC and rated in VA. I also
> imagine that most 9V ac sets will work ok on 12V ac. It might be worth while
> to measure the actual AC voltage on the transformer output to determine
> the transformer impedance. Most likely the output voltage is at rated VA.

> It would be my guess that most everthing would be happy running off one
> transformer rated with enough VA for all products at 12V ac. You could have
> some mutual coupling between sets but probably ok.

When running off a common dc power supply watch out for ground polarity.

We normally assume ground to be pos, but sometimes a piece of gear maay be neg ground.

To reduce 12 volt to 9 volt there are some very good and inexpensive regulator chips. Most are 1 amp max but a common 9Volt unit can be designed. Check with your supplier for schematics, there are spec sheets available for most (read most) equipment.

--

73, Tom

=====
Tom Wagner, Audio Visual Technician. Malaspina College Nanaimo British Columbia
(604) 753-3245, Local 2226 Fax (604) 755-8742 Callsign VE7GDA

I do not recyle..... I keep everything! (All standard disclaimers apply)
=====

Date: 16 Feb 93 08:29:13 GMT
From: usc!nic.csu.net!csus.edu!csusac!charnel!olivea!pagesat!netsys!agate!
howland.reston.ans.net!@network.UCSD.EDU
Subject: MF1278 and MAC
To: info-hams@ucsd.edu

Is there anybody out there using the multimode controller mfj1278
on an apple macintosh. I'm looking for software to be able
to be qrv on fax and sstv (getting the pictures on screen)
If you know anything about, please let me know

vy 73 de hb9gav @ hb9pd

* Andreas Wiesmann, Inst. Applied Physics, University of Bern CH *
* e-mail: wiesmann@iap.unibe.ch packet: hb9gav@hb9pd.hb9.eu *

Date: Tue, 16 Feb 1993 13:48:42 GMT
From: usc!howland.reston.ans.net!bogus.sura.net!udel!gvls1!gvlf9-q!
rossi@network.UCSD.EDU

Subject: MODS WANTED FOR HTX-100
To: info-hams@ucsd.edu

In article <hiAgrA9MBh107h@holly.can.com> jerrys@holly.can.com (Jerry Sturge) writes:

>I am the proud owner of an HTX-100 10 metre radio shaft radio. I am
>looking for any and all mods for this radio. Can it do fm??
>
>Also guys who are talking about the mailing list please add me as
>well. I would be interested.

I thought the HTX had FM so I bought one. After I got it home and found that it didn't, I spent the next few days trying to decide whether or not to keep it. I decided to return it.

There are some mods out for it. I heard something about an AGC mod and something about increasing the output to 35 watts. I am sure there are others.

The problem with FM would be in addition to getting the thing to receive and transmit FM, something would also be needed to allow for repeater offsets, unless you wanted to store the tx/rx frequencies in 2 memories and then have to constantly switch when going from tx/rx. Maybe it could be modified to switch memories automatically. I also wonder how the final would hold up under FM duty cycle.

- - - - -

The more I thought about it, I think someone at Radio Shack did not quite do all of their homework before the introduced this radio. If RS wanted to do it right, the radio should have included FM and LOWER sideband. They focused the radio too much towards the new NOVICE/TECH market and forgot about the rest of the ham market. They also ignored the fact that HAMS are famous for wanting to use a piece of equipment for *much* more than its simple original intended applications. For the few cents they saved by not including FM and LSB they cut off themselves off from a large chunk of additional sales.

I wanted to use the HTX to drive a 70 cm transverter, but for OSCAR MODE B you need to transmit a LSB signal on 70 cm and the HTX was totally incompatible with my existing transverter. I was not about to go out and buy/build a new transverter just to use this RS wonder..

Otherwise, the basic performance of the radio is not bad. I was really tempted to keep it anyway, but in the final analysis it did not do anything more than radios I already had, so I figured I could put the \$159 to better use.

=====

Pete Rossi - WA3NNA

rossi@VFL.Paramax.COM

Paramax Systems Corporation - a Unisys Company
Valley Forge Engineering Center - Paoli, Pennsylvania

Date: 16 Feb 93 09:32:50 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: Need help tuning TS690S
To: info-hams@ucsd.edu

In article <9302150828.AA01312@abel>, dit@maths.aberdeen.ac.UK (David Tock) wrote:

> I have a Kenwood TS690S. In different places, the spec for ht receiver is
> given as 500KHz-30Mhz and 50MHz-54Mhz, and also as 500KHz-54MHz. The bottom
> end may be wrong - it does not really matter.
> I have in the past listened between 30 and 50 MHz (specifically to the
> baby monitor we use, somewhere near 48-49MHz), but now I can not get the
> receiver to tune anywhere in the 30-50 range - it always jumps past.

David-

I've only had my TS690S for a few weeks, so I don't know the answer to your question. I suspect that the radio has many more "features" than the manual covers. There have been several instances where things didn't work the way I expected, but did when I tried later. Some I never figured out.

For example, what happens when you turn the radio on with the SEND button accidentally engaged? Is it covered in the manual? It turns out that you can't do anything that would require the transmitter. When I tried to auto-tune the antenna, the rig sent a CW "check". As soon as I disengaged the SEND button, everything worked OK.

What about the 1 MHZ button? The radio responds differently to tuning when it is engaged. I suspect that may be where your problem is. Try engaging or disengaging the 1 MHZ button, and see if you can tune the 30-50 range again. The radio is definitely supposed to receive all frequencies up to 60 MHz.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 16 Feb 93 08:32:04 -0500

From: vax.muskingum.edu!re_sims@sun.com
Subject: PRICE? Yaesu FRG-7 & Mini-reader?
To: info-hams@ucsd.edu

Hello All,

I have traded for a Yaesu FRG-7 SW Receiver, like new still in the box, with filters, and a Kantronics mini-reader.

I find after trading:

1. I am not sure I want to keep it.
2. That the items I traded and labor are a lot more expensive than I thought, my end.

I would like to find out what a reasonable price is for this equipment, keep in mind it has been in its original box most of its life.

Thanks in advance

Jim N4JDP at:

re_sims@vax.cns.muskingum.edu

Date: Tue, 16 Feb 93 10:25:19 GMT
From: usc!howland.reston.ans.net!agate!doc.ic.ac.uk!warwick!nott-cs!unicorn!
eeyimkn@network.UCSD.EDU
Subject: Real Hams Pass British Exams?
To: info-hams@ucsd.edu

In article <1993Feb10.173844.979@cbnewsm.cb.att.com> jeffj@cbnewsm.cb.att.com
(jeffrey.n.jones) writes:

>I saw the study materials for their licenses. The one advanced license
>study materials for it's test will give you a excellent background in
>radio theory. In fact we should probably copy it for our advanced
>licenses. It covers the various VFOs, transmitters, receivers, antennas,
>etc... Good radio course. My buddy who holds a British license said
>it takes a year of study to get that license, Class A is it? 73!

There is ONLY one examination in Britain for the full licenses. We don't

actually have an advanced licence - the only difference between Class A and Class B is that a Class A licence also needs 12wpm CW 'coz of the ITU regs. Novice licenses (2xxxxx) are a different matter though..

Cheers, Mike

```
--
+-- ==- If infants can have infancy, why can't adults have adultery? ==- ----+
\----- Mike Knell, Willoughby Hall, University of Nottingham, IO92JX -----/
 \  AMPRnet: mikee@g7gpa.ampr.org ==- Internet: eeyimkn@unicorn.nott.ac.uk /
  \  'oh well, whatever, nevermind...' ==- AX25: G7GPA@GB7BAD.#23.GBR.EU   /
```

```
-----
Date: 15 Feb 93 19:58:44 GMT
From: sun-barr!news2me.EBay.Sun.COM!cronkite.Central.Sun.COM!texsun!wb9rxw!kf5iw!
rwsys!ricksys!lawton!km6hd!srenfro@ames.arpa
Subject: RF and Power Supply
To: info-hams@ucsd.edu
```

In <1993Feb10.195322.5152@news.ysu.edu> ag821@yfn.ysu.edu (Jeff Gold) writes:
>I just put up a 160 meter 1/2 wave length dipole. It is
>only up in the air about 28 feet. It is resonant at 1.82
>or thereabouts. I don't have everything soldered up yet. The
>SWR is about 1.6:1 and under 2:1 for about 45Khz. I have it
>going into a AEA antenna tuner. When I turn the power past
>40 watts, the circuit breaker in my power supply trips.

Jeff,

I have seen this same situation many times both in my own shack and others. The problem is usually a 'ground loop'. This occurs when the ground or negative power leads on your equipment form a closed loop. The loop acts like an antenna and picks up rf. This is very common with people who run hf and vhf packet. A common ground loop starts at your electrical wall outlet and follows this path:

```
    wall outlet --> dc power supply #1 ---> hf radio ----> packet tnc --|
        /\                               |
        |----- wall outlet <--- dc power supply #2 <--- vhf radio <--|
```

Of course the loop could follow almost any path. At any rate, the solution follows:

1. Ground all equipment to a single ground system using PARALLEL leads i.e. your 8ft gnd rod - You have probably already done this :-)

2. Break the ground loop by isolating your power supply (or radio, or ???) from the household electrical ground using a '3 prong to 2 prong' adaptor. Since this equipment is already grounded to your ground system (see 1. above) it is safe but opens the problem loop.

I hope this solves or reduces your problem. Enjoy the TOP band!

73,
scott

Scott Renfro, km6hd | Net: km6hd!srenfro@lawton.lonestar.org
lawton, ok |

Date: 16 Feb 1993 14:59:24 GMT
From: usc!news.bbn.com!brosen@network.UCSD.EDU
Subject: Updates for CT Country List
To: info-hams@ucsd.edu

With all the recent political changes in the Balkans, I believe the COUNTRY list for the CT contest program needs to be updated. I would appreciate someone's posting the changes required to bring the CT COUNTRY list up to date.

Thanks in advance.

Bruce (brosen@bbn.com)
K1FFX

Date: 16 Feb 93 17:00:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: WANTED: TH-27 mods
To: info-hams@ucsd.edu

Subject: WANTED: TH-27 Mod Info

I have a Kenwood TH-27 handie-talkie and it has the seemingly obligatory poor front-end performance for high-sensitivity, wide frequency coverage, handhelds. It is nearly useless when in a dense urban environment, which is where I end up on most of my business trips.

I am planning to make a small "mast mount" filter assembly (145-148 MHz) to fit between the BNC antenna jack and the external antenna for use when traveling, but wonder if anyone has done anything about this IMD problem by

tip from someone on the newsgroup.

In a my subsequent practice I used cursive and now instead of taking all the time from one letter to another (at 5wpm), I quickly complete the letter and am waiting to here the next. Never was able to do that with block writing. Also, by nature I write very small.

Only hope that the examiners will be able to read the writing if they check for one minute good copy.

Erich

End of Info-Hams Digest V93 #218
